

Blue or Brown

Eleanor sat on the couch with her mom. They flipped the pages of the photo album. Eleanor loved looking at her baby pictures. She didn't remember being that little, but she liked to think that she did.

"Hey," said Eleanor. "I just noticed that my eyes are blue in these pictures." She ran over to the mirror. Her eyes were definitely brown.

"Are you sure these pictures are of me?" she asked her mom.

"Of course," said her mom. "Eye color doesn't always stay the same."

"Really?" asked Eleanor.

"Really," replied her mom. "Let's call your cousin Nina. She's a biologist. She can tell us more."

Nina had a lot to share. She confirmed that eye color could change. It was most likely to change in young childhood. And it was mostly likely to change from light to dark.

That's what had happened to Eleanor. Her eyes changed from blue to brown. "But why?" she asked Nina.

"Biologists have found that it's a build up of pigment in your eyes over time," Nina explained. "Pigment is color. Pigment can protect your eyes from sun damage."

“Is that why hair color can change too?” asked Eleanor’s mom. “I had blond hair when I was a kid. Now it is dark brown.”

“Exactly,” said Nina. “The pigment increases over time.”

“Can anything else change your eye color?” asked Eleanor.

“Colored contacts!” joked her mom.

“Illness and infection can also cause eye color change,” said Nina. “But that is more rare.”

“Humans are amazing,” said Eleanor. Nina agreed. But she told them that some animals are amazing too. Reindeer eyes are golden in the summer and turn deep blue in the winter.

“Wow!” said Eleanor. “Is it because of pigment?”

“No,” said Nina. “This is different. A mirror-like part of their eye reflects light to help them see in the dark. In the winter, when it is darker, the mirror reflects more blue light. It helps them to see better.”

“Science is so cool,” said Eleanor.

“I agree!” said Nina.



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NAME: _____ DATE: _____

1. When is eye color most likely to change in humans?
 - a. In the winter
 - b. In early childhood
 - c. After an illness
 - d. When their hair color changes

2. Which of the following is NOT mentioned about pigment?
 - a. Pigment is color.
 - b. Pigment can increase over time.
 - c. Pigment is like a mirror.
 - d. Pigment can protect your eyes from the sun.

3. What color hair does Eleanor's mom have?
 - a. Golden
 - b. Blond
 - c. Blue
 - d. Brown

4. Which of the following is most likely the reason why Nina agrees that science is cool?
 - a. Because she is a biologist
 - b. Because she is Eleanor's cousin
 - c. Because her eyes changed color too
 - d. Because she likes reindeer

Instructions for teachers:

These questions can be used to assess understanding of the reading passage.

The item in bold is the correct answer for each question.

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